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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,644

03/31/2007

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8455

116 7590 11/16/2009  
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EXAMINER

HERRING, BRENT W

ART UNIT

PAPER NUMBER

3633

MAIL DATE

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,644	<b>Applicant(s)</b> KANETSUNA, KAZUO	
	<b>Examiner</b> BRENT W. HERRING	<b>Art Unit</b> 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 6-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>09172009</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 9/17/09 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

2. The drawings were received on 9/17/09. These drawings are accepted.

### ***Claim Rejections - 35 USC § 102***

3. Claims 6-7, 9-11, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Haring, EP 0159454.

Regarding claim 6:

'454 discloses a heat insulation panel (A) that also provides a placing mold form installed on the outdoor side of a concrete wall body (M), said heat insulation panel comprising an integral assembly of a heat insulation material molded in the form of a panel (A) and a plastic reinforcing panel (B) installed on the outdoor side of said heat insulation material, said plastic reinforcing panel having a number of groove-like air passage sections (11, 12, see Fig. 3) of U-shape cross-section with elongate openings disposed against and open to the

outdoor side of said heat insulation material capable of permitting communication in an in-plane direction with drainage of dew and/or rain water.

Regarding claim 7:

'454 discloses claim 6, wherein the heat insulation material panel is in the form of a flame-resistant or incombustible panel made of resin foam (note that foamed plastic is a flame-resistant resin foam).

Regarding claim 9:

'454 discloses claim 6, wherein said heat insulation material includes an inorganic material (foamed plastic).

Regarding claim 10:

'454 discloses an outer heat insulation wall structure comprising an integral assembly of a heat insulation material molded in the form of a panel and a plastic reinforcing panel installed on the outdoor side of said heat insulation material capable of receiving an exterior finish, said plastic reinforcing panel including a generally flat sheet having a plurality of projecting spaced walls extending to said heat insulation material to form groove-like air passage sections, said groove-like air passage sections being of U-shape cross-section open to and extending along the outdoor side of said heat insulation material capable of permitting communication in an in-plane direction with drainage of dew and/or rain water, said flat sheet being spaced from said heat insulation material by said projecting spaced walls for receipt of said exterior finish.

Regarding claim 11:

'454 discloses an outer heat insulation wall structure having an outdoor side for receiving an exterior finish and an indoor side for providing a molding form against which concrete is placed and shaped to form a concrete wall comprising a preformed layered assembly of a heat insulation material (A) secured to a plastic reinforcing panel (B), said heat insulation material being located adjacent said indoor side of said wall structure and providing said molding form, said plastic reinforcing panel (B) being located on the outdoor side of said heat insulation material and providing said outdoor side of said wall structure, said plastic reinforcing panel including a plurality of groove-like air passage (11, 12) sections of U-shape cross-section including elongate openings disposed against and open to said heat insulation material, said air passage sections providing airflow along said wall structure.

Regarding claim 16:

'454 discloses a method of forming a concrete wall having an outer heat insulation wall structure comprising the steps of providing the outer heat insulation wall structure of claim 11, and placing concrete against said heat insulation material to form said concrete wall.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 3633

5. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haring, EP 0159454 in view of Hei, JP1994-6530.

Regarding claim 8:

'454 discloses claim 7, but does not expressly disclose wherein the foam resin is a phenol resin.

'530 discloses wherein the foam is a phenol resin foam.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a phenol resin foam for the foam material of '530.

The motivation to use a phenol resin foam would have been to prevent significant thermal shrinking of the insulation layer.

Regarding claim 17:

'454 discloses claim 16, but not the further limitations of claim 17.

'530 discloses providing a sheathing board (25) adjacent the interior side of said wall structure spaced from said molding form, and securing said sheathing board to said wall structure by spaced mechanical ties (22) and shaping the indoor side of said concrete wall with said sheathing board.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide the sheathing board and mechanical ties of '530 to the structure of '454.

The motivation to combine would have been to provide a secure smooth finish to the interior of the concrete wall.

Art Unit: 3633

6. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haring, EP 0159454 in view of Harrap, US 2,140,226.

Regarding claim 12:

‘454 discloses claim 11, wherein the plastic reinforcing panel includes a generally flat sheet having a plurality of projecting spaced walls extending to said heat insulation material to form said groove like air passage sections, said flat sheet being located and exposed at said outdoor side of said wall structure to receive said exterior finish,

but ‘454 does not expressly disclose wherein said spaced walls have in-turned wall ends contacting said heat insulation material, separator cones mounted within said air passage sections and projecting between said in-turned wall ends for temporarily engaging tie bolts to fix the position of said integral assembly and said molding form during placing of concrete.

‘226 discloses wherein spaced walls have in-turned wall ends (see Fig. 3) contacting the surface beneath, separator cones (11) mounted within said air passage sections (see Fig. 4) and projecting between said in-turned wall ends capable of use for temporarily engaging tie bolts to fix the position of said integral assembly and said molding form during placing of concrete.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to shape the plastic reinforcing panel walls as taught by the building block of ‘226 and it also would have been obvious to mount separator cones within the air passage sections of ‘454 as taught by ‘226.

The motivation to have the spaced walls in-turned would have been to provide channels with flanges to provide for holding of clips. The motivation to provide separator cones would have been to provide for a temporary connection to the underlying insulation board prior to drying of an adhesive.

7. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haring, EP 0159454 in view of Harrap, US 2,140,226 as applied to claim 12 above and further in view of Hei, JP1994-6530.

Regarding claim 13:

'530 discloses claim 12, wherein said heat insulation material is permeable to indoor vapor (para. 0018) and communicates with said groove-like air passage sections to inhibit condensation from collecting within said wall structure.

Regarding claim 14:

'454 discloses wherein the resin foam is flame resistant.

Regarding claim 15:

'454 discloses wherein the heat insulation material and plastic reinforcing panel are adhesively secured together.

Should applicant argue that the layers are not adhesively secured together, note that it would have been obvious to secure them together by adhesive, as it is known to adhesively secure adjacent sheathing layers on a



building to a person of ordinary skill in the art without achieving extraordinary or unpredictable results.

8. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haring, EP 0159454 in view of Hei, JP1994-6530 as applied to claim 17 above and further in view of Harrap, US 2,140,226.

Regarding claim 18:

'454 in view of '530 discloses claim 17, and '530 discloses wherein said spaced mechanical ties comprise tie bolts, but '454 in view of '530 does not expressly disclose the step of securing said sheathing boarding including positioning separator cones in the air passage sections and temporarily connecting said tie bolts to said separator cones and said sheathing board *in order to fix the position of said integral assembly including said mold form with respect to said sheathing board during placement of concrete.*

'226 discloses securing a sheathing board (2) and positioning separator cones (11) in air passage sections and temporarily connecting tie bolts to the cones and sheathing board to fix the position (see Fig. 4).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to mount separator cones within the air passage sections of '454 as taught by '226.

The motivation to provide separator cones attached with tie bolts would have been to provide for a temporary connection to the underlying insulation board prior to drying of an adhesive.

Regarding claim 19:

'226 discloses wherein spaced walls have in-turned wall ends (see Fig. 3) contacting the surface beneath, separator cones (11) mounted within said air passage sections.

The motivation to have the spaced walls in-turned retaining the cones in the air passage would have been to ensure the cones stay attached to the covering layer.

### ***Response to Arguments***

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 3633

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENT W. HERRING whose telephone number is (571)270-3661. The examiner can normally be reached on Monday-Thursday, 8:00AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on (571)272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. W. H./  
Examiner, Art Unit 3633

/Robert J Canfield/

Primary Examiner, Art Unit 3635